

October 18, 2004



Section 183
New wetland mitigation
definitions and ratios

Sponsor: Dow Constantine

rb

Proposed No.: 2004-0122

1 **AMENDMENT TO PROPOSED SUBSTITUTE ORDINANCE 2004-0122,**

2 **VERSION 2**

3 **On page 37, at the beginning of line 1035, insert:**

4 **“NEW SECTION. SECTION 115.** There is hereby added to K.C.C. chapter
5 21A.06 a new section to read as follows:

6 **Wetland creation.** Wetland creation: For purposes of wetland mitigation, the
7 manipulation of the physical, chemical, or biological characteristics present to develop a
8 wetland on an upland or deepwater site, where a wetland did not previously exist.

9 Activities to create a wetland typically involve excavation of upland soils to elevations
10 that will produce a wetland hydroperiod, create hydric soils, and support the growth of
11 hydrophytic plant species. Wetland creation results in a gain in wetland acres.

12 **NEW SECTION. SECTION 116.** There is hereby added to K.C.C. chapter 21A.06
13 a new section to read as follows:

14 **Wetland enhancement.** Wetland enhancement: The manipulation of the
15 physical, chemical, or biological characteristics of a wetland site to heighten, intensify or
16 improve specific functions or to change the growth stage or composition of the vegetation
17 present. Enhancement is undertaken for specified purposes such as water quality
18 improvement, flood water retention or wildlife habitat. Wetland enhancement activities

typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods or some combination of these. Wetland enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres.

NEW SECTION. SECTION 117. There is hereby added to K.C.C. chapter 21A.06 a new section to read as follows:

Wetland reestablishment: Wetland reestablishment: For purposes of wetland mitigation, the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Activities to reestablish a wetland include removing fill material, plugging ditches, or breaking drain tiles. Wetland reestablishment results in a gain in wetland acres.

NEW SECTION. SECTION 118. There is hereby added to K.C.C. chapter 21A.06 a new section to read as follows:

Wetland rehabilitation: Wetland rehabilitation: For purposes of wetland mitigation, the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Activities to rehabilitate a wetland include breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland. Wetland rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres.”

On pages 185 through 190, delete lines 3897 through 3982 and insert:

“SECTION 182. Ordinance 10870, Section 481, as amended, and K.C.C. 21A.24.340 are each hereby amended to read as follows:

Wetlands ((:)) -- specific mitigation requirements. In addition to the requirements in section 144 of this ordinance and K.C.C. 21A.24.130, the following applies to mitigation to compensate for the adverse impacts associated with an alteration to a wetland or wetland buffer:

A. ~~((Restoration shall be required if a wetland or its buffer is altered in violation of law or without any specific permission or approval by King County. The following minimum requirements shall be met for the restoration of a wetland:~~

~~1. The original wetland configuration shall be replicated including its depth, width, length and gradient at the original location;~~

~~2. The original soil type and configuration shall be replicated;~~

~~3. The wetland edge and buffer configuration shall be restored to its original condition;~~

~~4. The wetland, edge and buffer shall be replanted with vegetation native to King County that replicates the original vegetation in species, sizes and densities; and~~

~~5. The original wetland functions shall be restored including, but not limited to, hydrologic and biologic functions.))~~ Mitigation measures must achieve equivalent or

greater wetland functions, including, but not limited to:

1. Habitat complexity, connectivity and other biological functions; and

2. Seasonal hydrological dynamics, as provided in the King County Surface

Water Design Manual;

B. ~~((The requirements in subsection A. of this section may be modified if the applicant demonstrates that greater wetland functions can otherwise be obtained.))~~ The following ratios of area of mitigation to area of alteration apply to mitigation measures for permanent alterations:

1. For alterations to a wetland buffer, a ratio of one to one; and

2. For alterations to a wetland:

<u>Category and type of wetland</u>	<u>Wetland re-establishment or creation</u>	<u>Wetland rehabilitation</u>	<u>1:1 Wetland re-establishment or wetland creation (R/C) and wetland enhancement (E)</u>	<u>Wetland enhancement only</u>
<u>Category IV</u>	<u>1.5:1</u>	<u>3:1</u>	<u>1:1 R/C and 2:1 E</u>	<u>6:1</u>
<u>Category III</u>	<u>2:1</u>	<u>4:1</u>	<u>1:1 R/C and 2:1 E</u>	<u>8:1</u>
<u>Category II estuarine</u>	<u>Case-by-case</u>	<u>4:1 rehabilitation of an estuarine wetland</u>	<u>Case-by-case</u>	<u>Case-by-case</u>
<u>All other Category II</u>	<u>3:1</u>	<u>8:1</u>	<u>1:1 R/C and 4:1 E</u>	<u>12:1</u>
<u>Category I forested</u>	<u>6:1</u>	<u>12:1</u>	<u>1:1 R/C and 10:1 E</u>	<u>Case-by-case</u>
<u>Category I based on score for functions</u>	<u>4:1</u>	<u>8:1</u>	<u>1:1 R/C and 6:1 E</u>	<u>Case-by-case</u>
<u>Category I natural heritage site</u>	<u>Not allowed</u>	<u>6:1 rehabilitation of a natural heritage site</u>	<u>Case-by-case</u>	<u>Case-by-case</u>
<u>Category I coastal lagoon</u>	<u>Not allowed</u>	<u>6:1 rehabilitation of a coastal lagoon</u>	<u>Case-by-case</u>	<u>Case-by-case</u>
<u>Category I bog</u>	<u>Not allowed</u>	<u>6:1 rehabilitation of a bog</u>	<u>Case-by-case</u>	<u>Case-by-case</u>
<u>Category I estuarine</u>	<u>Case-by-case</u>	<u>6:1 rehabilitation of an estuarine wetland</u>	<u>Case-by-case</u>	<u>Case-by-case</u>

C. ~~((Replacement shall be required if a buffer is altered under an approved development proposal or a wetland is used for a regional flow control facility or other~~

~~approved use. The requirements for the restoration of wetlands shall be met by~~
~~replacement wetlands.))~~ The following ratios of area of mitigation to area of alteration
apply to mitigation measures for temporary alterations where wetlands will not be
impacted by permanent fill material:

<u>Wetland category</u>	<u>Permanent conversion of forested and shrub wetlands into emergent wetlands</u>			<u>Mitigation for temporal loss of forested and shrub wetlands when the impacted wetlands will be revegetated to forest or shrub communities</u>		
	<u>Enhancement</u>	<u>Rehabilitation</u>	<u>Creation or restoration</u>	<u>Enhancement</u>	<u>Rehabilitation</u>	<u>Creation or restoration</u>
<u>Category I</u>	<u>6:1</u>	<u>4.5:1</u>	<u>3:1</u>	<u>3:1</u>	<u>2:1</u>	<u>1.5:1</u>
<u>Category II</u>	<u>3:1</u>	<u>2:1</u>	<u>1.5:1</u>	<u>1.5:1</u>	<u>1:1</u>	<u>.75:1</u>
<u>Category III</u>	<u>2:1</u>	<u>1.5:1</u>	<u>1:1</u>	<u>1:1</u>	<u>.75:1</u>	<u>.5:1</u>
<u>Category IV</u>	<u>1.5:1</u>	<u>1:1</u>	<u>.75:1</u>	<u>Not applicable</u>	<u>Not applicable</u>	<u>Not applicable</u>

~~D. ((Enhancement may be allowed if a wetland or buffer will be altered under to~~
~~a development proposal, but the wetland's biologic and/or hydrologic functions will be~~
~~improved. Minimum requirements for enhancement shall be established in~~
~~administrative rules.))~~ The department may increase the mitigation ratios provided in
subsections B and C of this section under the following circumstances:

1. The department determines there is uncertainty as to the probable success of
the proposed restoration or creation;
2. A significant period of time will elapse between the impact caused by the
development proposal and the establishment of wetland functions at the mitigation site;
3. The proposed mitigation will result in a lower category wetland or reduced
functions relative to the wetland being impacted; or
4. The alteration causing the impact was an unauthorized impact.

~~E. ((All alterations of wetlands shall be replaced or enhanced on the site or within~~
~~the same drainage basin using the following formulas: class 1 and 2 wetlands on a two-~~

91 ~~to one basis and class 3 wetlands on a one to one basis with equivalent or greater~~
92 ~~biologic functions including, but not limited to, habitat functions and with equivalent~~
93 ~~hydrologic functions including, but not limited to, storage capacity.))~~ The department
94 may decrease the mitigation ratios provided in subsections B and C of this section under
95 the following circumstances:

96 1. The applicant demonstrates by documentation submitted by a qualified
97 wetland specialist that the proposed mitigation actions have a very high likelihood of
98 success based on hydrologic data and prior experience;

99 2. The applicant demonstrates by documentation by a qualified wetland
100 specialist that the proposed actions for compensation will provide functions and values
101 that are significantly greater than the wetland being impacted;

102 3. The applicant demonstrates that the proposed actions for mitigation have
103 been conducted in advance of the impact caused by the development proposal and that
104 the actions are successful; or

105 4. In wetlands where several wetland hydrogeomorphic classes, including, but
106 not limited to depressional, slope, riverine and flow through, are found within one
107 delineated boundary, the department may decrease the ratios if:

108 a. Impacts to the wetland are all within an area that has a different
109 hydrogeomorphic class from the one used to establish the category;

110 b. The category of the area with a different class is lower than that of the entire
111 wetland; and

c. The applicant provides adequate hydrologic and geomorphic data to establish that the boundary between the hydrogeomorphic classes lies outside of the footprint of the impacts.

~~F. ((Replacement or enhancement off the site may be allowed if the applicant demonstrates to the satisfaction of King County that the off-site location is in the same drainage sub-basin as the original wetland and that greater biologic and hydrologic functions will be achieved. The formulas in subsection E of this section shall apply to replacement and enhancement off the site.))~~ For temporary alterations to a wetland or its buffer that are predominately woody vegetation, the department may require mitigation in addition to restoration of the altered wetland or buffer;

~~G. ((Surface water management or flood control alterations including, but not limited to, wetponds shall not constitute replacement or enhancement unless other functions are simultaneously improved.~~

~~H.))~~ Mitigation ((sites should be located to alleviate wildlife habitat fragmentation and avoid impacts to and prevent loss of farmable land within agricultural production districts)) of an alteration to a buffer of a wetland that occurs along an aquatic area lake shoreline in accordance with an allowed alteration under this chapter shall include, but is not limited to, on-site revegetation, maintenance and other restoration of the buffer or setback area to the maximum extent practical; and

H. The department may consider two or more contiguous sites under common ownership and located in the same drainage subbasin, as one site for the purpose of mitigation ratios.

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138 **Renumber ordinance sections and revise cross-references accordingly:**

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140 **Effect:** Revises mitigation ratios for consistency with state and federal guidelines and
141 adds language to address ratios for temporary impacts such as utilities construction.